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22. BAMBOO BRIDGE FISHING WITH LIFT NET

(*With a text-figure*)

The fisherfolk of Nepal have devised varied fishing methods which may probably date back to basic culture of mankind. During the fishery resource survey of the Kulaekhani area of Nepal, an unique fishing method was witnessed. This is locally known as "Thakaulight Kurnae" which means waiting for fish under bamboo bridge. In the fishing village of Kulaekhani every fisherman has ownership of his own "Thakaulighat" or "traditionally owned fishing section". Fishing snow trout sitting on bamboo platform and dipping and lifting net is an impressive spectacle that may be observed in Kulaekhani streams.

For bamboo bridge fishing following accessories are needed:

I. *Bamboo bridge*:

The bamboo bridge fishing platform is set above an ideal river section, where quiet pools and fish shelter occur. The bamboo bridge is made by stretching green bamboo stems across two supporting rocks. The bamboo bridge lies just about 60 cm above the water level of the fishing pool. The bridge so made is meticulously tied with vines draped with green leafy twigs of shrubs.

II. *Dip net or lift net*:

The lift net is prepared from the fibre of the plant (*Bhoehmeria platyphylla*). It is squarish in shape and measures about 125× 125 cm. The mesh size of the net is about 1.5 cm. The netting material weighs 60 gm. The four corners of the lift net are tied respectively and held between four bamboo poles each measuring 120 cm (figure 1). Each adjacent pair of bamboo poles is held in each hand of the fisherman while operating the net in water. As soon as fishes swim over the net the poles in each hand are clapped together.

III. *Stone slabs*:

In the vicinity of the fishing area white stone slabs are put together. The stone slabs attract and entice fish to swim nearby and provide the fisherman good background to see the fish. The catch is made by dipping the net, and lifting it from the water at the right moment when a shoal of snow trout is gathered over the stone slabs.

FISHING OPERATION

A fisherman sits on the bamboo bridge and watches the water quietly. When he detects a

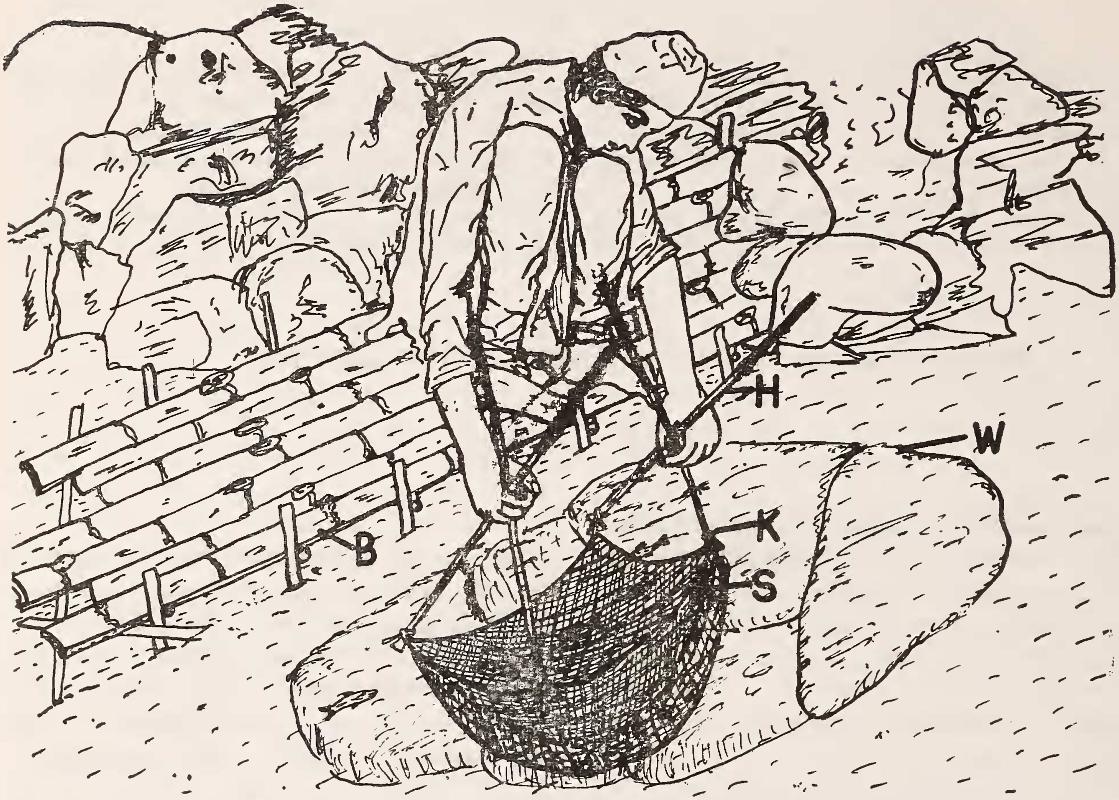

Fig. 1. Showing bamboo bridge fishing with lift net. (B, Bamboo bridge; H, Bamboo pole; K, Knot of netting material; W. Stone slabs; S, Fish shoal trapped inside the net.

moving shoal of fish, he orients the net in a favourable plane so that the net hangs loosely. The swimming fish passing by is then lifted clear out of water. While operating, the ends of the lift net are held tightly so that the captured fish may not escape.

Environmental conditions

The bamboo bridge fishing is practised in clear water pools of hill streams during spring and summer. In monsoon this method is not fruitful due to high turbidity of the water. Generally a warm sunlit day is chosen for fishing. This is an efficient and selective method of fishing in hill streams. This method is useful for sampling snow trout population in hill-streams as it is selective and allows the fisherman to catch only large fish and discard smaller ones. About 5-8 kg. of fish may be harvested daily (in 8 hours of fishing) by this method. The hydrography of Kulaekhani river has now changed greatly due to the erection of a dam and diversion of streams. This method is now used in adjacent hill-streams and the upper reaches of Kulaekhani Khola, for capturing snow trout (*Schizothorax plagiostomus* and *S. richardsonii*).

Brandt (1972) opined that the term 'lift net' and 'dip net' bear more or less the same meaning. He preferred use of the former term because the catch is collected not be dipping the nets but by lifting them again. Therefore, the term 'lift net' is used in the present context. Brandt (1972), Went (1964) and Treide (1965) described lift nets and operating platforms of entirely different design and structures used in fishing in European waters. The present method of fishing appears to be a novel type. Enquiries show that the indigenous fishing method has been used for over two centuries.

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23. OCCURRENCE OF A SPECIES OF *PALINNOTUS* (AMPHIPODA) ON PORT BLAIR SHORE (ANDAMAN ISLANDS)

(*With fifteen text-figures*)

While examining the Phytal-faunal associations of littoral algal samples of *Halimeda opuntia* and *Jania rubens* collected at Port Blair, Andaman Islands, three specimens of the extremely rare amphipod genus *Palinnotus* Stebbing (1900) were collected. A perusal of literature reveals the existence of only four species of *Palinnotus*. The distribution of the species of this genus is given in Table 1 along with reference. The present record forms the first report of *Palinnotus* from eastern Indian Ocean.

A brief description and illustrations of the *Palinnotus* are given below.

The specimens collected ranged 2 to 3.13 mm in length and 1 to 2 mm in breadth. The presence of an elongate ovatoquadrate article 2 of the paraepod 5, subquadrate or trapezoidal article 4 of paraepod 5, clawed dactyle of paraepod 5, a distinct small conical fleshy palp of first maxilla and well defined median spination on article 6 of gnathopod 1 and absence of such spination on gnathopod 2 are the diagnostic features. The absence of a nasiform posterior lobe and distal constriction on article 2 of paraepod 5 readily differentiate the specimens from *P. natalensis*, *P. thomsoni* and *P. holmesi*. The specimens differ from